

Open Research Online

The Open University's repository of research publications and other research outputs

Butterflies, Magic Carpets, and Scary Wild Animals: An Intervention with a Young Gymnast

Journal Item

How to cite:

Howells, Karen (2016). Butterflies, Magic Carpets, and Scary Wild Animals: An Intervention with a Young Gymnast. *Case Studies in Sport and Exercise Psychology*, 1 pp. 26–37.

For guidance on citations see [FAQs](#).

© [not recorded]



<https://creativecommons.org/licenses/by-nc-nd/4.0/>

Version: Accepted Manuscript

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

oro.open.ac.uk

Butterflies, Magic Carpets, and Scary Wild Animals: An Intervention with a Young Gymnast

Karen Howells

The Open University, United Kingdom

Author Note

Karen Howells, Faculty of Wellbeing, Education and Language Studies, The Open University, United Kingdom.

Correspondence concerning this article should be address to Karen Howells, Faculty of Wellbeing, Education and Language Studies, The Open University, Walton Hall, Milton Keynes, Buckinghamshire, MK7 6AA. E-mail: karen.howells@open.ac.uk

Abstract

This article presents a reflective case example of a sport psychology consultation carried out with a 9-year-old gymnast during the final year of the consultant's training to become a British Psychological Society (BPS) chartered sport psychologist. During this period of time, the author was under the supervision of an experienced applied sport psychologist. The article draws on the published research in applied sport psychology and the wider child development literature to inform and negotiate the challenges of a neophyte practitioner working in a relatively unfamiliar sport with a very young gymnast. The intervention, which took place over six months, involved a focus on psychological skills training (PST). This paper reflects on the intervention experience and makes observations that may be of benefit to both neophyte and practiced consultants working with very young children. Although the consultancy involved goal setting, relaxation, and commitment, the focus of this paper is on those activities and skills which are specific to such a young athlete and which may be of interest to other practitioners in similar scenarios.

Keywords: Early specialization, imagery, performance, psychological skills, reflection

At the time of the consultancy I was in the final year of my BPS QSEP and identified myself

1 as a sport psychologist in training under the supervision of an experienced sport psychologist. The
2 supervision comprised monthly meetings with the supervisor and up to four other candidates; at these
3 meetings issues relating to cases were discussed in a confidential and secure environment. Early on in
4 the supervisory process, as neophyte practitioners all of the candidates were encouraged to explore the
5 extant literature on philosophy (e.g., Poczwadowski, Sherman, & Ravizza, 2004), discuss the
6 implications of philosophy, and reflect on what our own philosophies comprised. In the first instance
7 my philosophy was influenced by my previous experiences in both sport and academia. As a UKCC
8 Level 2 coach in an aquatic sport, my own experiences of the coach-athlete relationship influenced
9 both how I perceived the relationship between a client and a practitioner, and informed what my
10 sport-related and personal values comprised. As a swimming coach my coaching philosophy was
11 concerned with facilitating swimmers in achieving their potential irrespective of the level that they
12 were competing at. I considered coachability as an important athlete characteristic, but this was
13 within the context of a collaborative coach-athlete relationship that was characterized as involving a
14 degree of autonomy from the swimmers, mutual respect, communication, and commitment (cf.
15 Keegan, Spray, Harwood, & Lavalley, 2010). This coaching philosophy informed how I approached
16 my training and engagement with athletes as a trainee sport psychologist. In this particular case my
17 coaching philosophy was closely aligned with my approach to the gymnast with both having a focus
18 on communication and athlete-autonomy. Given that both swimming and gymnastics are considered
19 early specialization sports and involve young children in an elite sporting domain, my coaching
20 approach inevitably influenced my approach with the young gymnast. Mutual respect, open and
21 honest communication, and athlete autonomy were important from the outset and at this stage of my
22 training. Prior to the commencement of this consultancy, I had already ceased working with a young
23 gymnast who had resisted sport psychology support but was complying on the grounds that her
24 mother had insisted that she needed support to improve her performance. At the time I was
25 uncomfortable about monetary gain from a client who was disengaged not only from psychological
26 support, but also from gymnastics. Furthermore, by her own admission she was only training and
27 attending sessions with me because she had been told to do so. Accordingly, I felt that it was not in
28 the best interests of that client for our engagement to continue.

1 In the present case, even being cognizant of the early specialization nature of gymnastics
2 (Baker, Cogley, & Fraser-Thomas, 2009), the developmental needs of the child came before the
3 performance goals of the athlete. This philosophy was motivated by my own belief that that
4 childhood should be a fun exciting time where sport provides opportunities for challenge, fun, and the
5 development of motor, cognitive, and social skills. Nevertheless, these two potentially conflicting
6 foci of development versus performance were not, I perceived, to be incompatible; Self-
7 Determination Theory (SDT; Ryan & Deci, 2000) proposed that different forms of motivation can
8 impact on both performance *and* wellbeing. I acknowledged that intrinsic motivation involving
9 autonomy, fun, and challenge was fundamental in the gymnast's well-being but would also be
10 instrumental in having a positive impact on her performance. Accordingly, I prioritized the
11 facilitation of her physical, psychological, and social development (cf. Camiré, Forneris, Trudel, &
12 Bernard, 2011). This philosophy was made clear to the mother of the gymnast both in the initial
13 email communication and in the intake 'needs analysis' interview. The mother responded that my
14 philosophy was consistent with her own views, and expressed that her daughter's enjoyment of the
15 sport was more important than her current or eventual performance achievements.

16 Prior to embarking on a career as a sport psychologist I had spent 10 years in academia as a
17 psychology lecturer and was therefore familiar with predominantly cognitive theories of child
18 development. Success in any domain, including sport, requires the development of executive
19 functions, which include the manipulation of mental concepts and staying focused. The development
20 of these functions have to be addressed in an age-appropriate manner which should involve the
21 incorporation of play (cf. Diamond, & Lee, 2011). Furthermore, in addition to my applied training, at
22 the time of this consultancy I was midway through a doctorate in sport psychology and actively
23 carrying out qualitative research involving elite athletes. The focus on qualitative research had
24 engendered in me the importance of the voice of the participant or the client in research or practice,
25 this was particularly important to me in dealing with children whose voices in narratives of success
26 are often unheard. This prior and continuing academic engagement highlighted to me the importance
27 of the link between research and applied practice and ensured that evidence-based practice was
28 fundamental in my approach to my clients. This was problematic at times such as in the case of this

1 particular consultancy due to a dearth of guidance about engaging with such a young athlete.
2 Accordingly, following guidance from Orlick and McCaffrey (1991), and informed by my previous
3 academic field of general psychology, I considered it pertinent to draw on the general psychology and
4 developmental literature to further inform this intervention.

5 **The Case**

6 The consultancy was initiated via email by the mother of the nine-year old gymnast who felt
7 that her daughter had a 'mental block' in respect of a particular gymnastic move, specifically the
8 'flick on the beam' which involves a backwards handspring on the beam. At this stage in my training,
9 I felt that I had the necessary skills and competencies to work with a gymnast who was struggling
10 with a technical move as I had a rudimentary understanding of the moves that the gymnast was doing
11 having previously worked with two 10- and 12-year-old gymnasts. I had used psychological skills
12 training involving goal setting, imagery, and relaxation in previous consultations across a number of
13 sports to enhance skill acquisition, and furthermore, I had the support of an experienced supervisor
14 who could provide guidance on ethical, theoretical and practical issues. However, at this juncture in
15 my career, I was unsure of the suitability of a consultancy intervention for a child of this age. An
16 initial literature search identified little guidance, however, Orlick and McCaffrey (1991) stressed the
17 importance of interventions with young children being informed by developmental psychology. This
18 guidance was congruent with my previous experience and supported my intuition that I would need to
19 seek informing literature outside the field of sport psychology. Further investigation identified the
20 discussion by Sherman and Poczwardowski (2005) which addressed sport psychology provision in the
21 context of Piaget and Inhelder's (1971) theories of cognitive development. The gymnast at nine years
22 old, had moved through the sensori-motor and preoperational stages of development and was at the
23 concrete operations stage of cognitive development, meaning that she was able to think logically and
24 systematically about concrete objects, events, and experiences. However, she would not yet have
25 reached the formal operations stage which develops in early adolescence, and therefore it was unlikely
26 that she would be able to deal with complex abstractions and hypothetical situations. This meant that
27 any intervention put in place would have to focus on concrete, discrete, and real events. Accordingly,
28 where possible hypothesizing about outcomes that had not already been experienced needed to be

1 avoided. Sherman and Poczwadowski (2005) reported that their research was with athletes who were
2 over 10 years old but they acknowledged that: “there is evidence that children much younger than 10
3 can benefit from mental or coping skills instruction” (p. 20). Further, they identified that 10-12 year
4 old girls were better able than their male counterparts to be able to listen and implement concepts
5 relating to psychological skills. This evidence pointed to the appropriateness of psychological skills
6 training for the gymnast. With this knowledge informing my decisions I arranged a first meeting with
7 the mother and her daughter to carry out a needs analysis.

8 At the beginning of this particular consultancy my personal and professional philosophy was,
9 and remains several years later, client-focused, but I accept that within this philosophy, different
10 approaches, models, and modes of practice may be used depending on the individual client’s needs.
11 In accordance with Aoyagi and Poczwadowski’s (2012) differentiation of models, I decided that it
12 was appropriate to adopt a mental skills approach and consequently this particular consultancy was
13 characterized by psychological skills training (PST) involving goal setting, imagery, and relaxation
14 that resonated with the principles advocated by Orlick’s (2008) Wheel of Excellence. The focus of
15 this model, which provides a holistic grounded theory of the mental skills required to excel in a
16 variety of sports, involves supporting and guiding individuals towards personal excellence. The
17 wheel involves attention to focus, commitment, mental readiness, positive images, confidence,
18 distraction control, and ongoing learning. As a junior high performing gymnast who was struggling
19 with focus and confidence, the use of positive images and distraction control to address the gymnast’s
20 mental block made Orlick’s model appropriate to inform the intervention. Barbour and Orlick (1999)
21 identified links with the model and research carried out with elite athletes. Of particular interest to
22 this case is the mapping of positive images to the use of mental imagery in research involving
23 gymnasts and mixed sports (viz. Mahoney & Avner, 1977; Orlick & Partington, 1988).

24 **Ethics**

25 In the United Kingdom ethical engagement is informed by the British Psychological Society’s
26 (BPS; 2009) code of ethics which requires consultants to observe four principles when engaging with
27 clients: respect, competence, responsibility, and integrity. These principles were adhered to
28 throughout the consultancy. *Respect* for the client was ensured through for example, maintaining

1 confidentiality, through encouraging self-determination where possible, and through the maintenance
2 systematic but non-judgmental records of meetings. The principle of *competence* was achieved
3 through practices including informing the parents of my trainee status, engaging with my supervisor
4 to address my concerns over the ethics of working with young children, and through continued
5 engagement with the theoretical and developmental literature. *Responsibility* was demonstrated when
6 it became apparent that the young gymnast was developing an attachment to me that was manifesting
7 itself in a dependency that was potentially detrimental to her welfare. This was apparent in the
8 excitement with which she looked forward to the sessions. In consultation with the parents I decided
9 to terminate the consultancy. *Integrity* was realized throughout the consultancy through honest and
10 open communication with both the gymnast and the parents.

11 **Needs Analysis**

12 Following on from the initial email communication I met with the young gymnast and her
13 mother. This goals of the initial interview were two-fold. The first was to collect information about
14 the viability of the consulting relationship and the issues presented, and second, to build rapport, trust,
15 and credibility with both the parent and the gymnast (cf. Greenlees, 2009). The focus was on the
16 gymnast's engagement, her ability to listen, and to make a subjective assessment about whether she
17 would be able to cope with the consulting process. I decided against using psychometric tests, such as
18 the Sport Imagery Questionnaire (SIQR, Hall, Mack, Paivio & Hausenblas, 1998) which I would
19 usually use when considering utilizing imagery with an athlete, as many of the tests available were
20 inappropriate for use with such a young child. Contrary to my reservations concerning the age of the
21 gymnast and my perceptions about how her age would impact on her ability to engage and take
22 ownership of the process, it was the gymnast, rather than the mother who provided the majority of the
23 information about her ability, her fears, and her motivations. With an emphasis on the client's needs at
24 the center of the consultancy, it was apparent from an initial meeting with the gymnast and her mother
25 that the child's needs were concerned with performance enhancement of specific skills and the
26 development and maintenance of her ongoing passion for gymnastics.

27 It was apparent in the first session that in addition to the 'mental block' about the move, the
28 gymnast's failure to complete the move on the beam, despite proficiency doing the move on the mat,

1 was frustrating members of the coaching team who, the mother perceived to be treating her daughter
2 with some disdain and believing her daughter to be “difficult”. Despite the salience of this issue, it
3 was apparent that the interaction between the coaches and the gymnast could only be addressed within
4 the confines of the consulting relationship, as the parents were reluctant to inform the coaches that
5 their daughter was seeing a sport psychologist.

6 **The Presenting Issues**

7 The gymnast had previously been able to execute a flick on both the low and regular height
8 beam but had developed a fear of it that was now debilitating, she was now only able to complete the
9 move on the mat. The backwards handspring, a dynamic skill, is described in detail by Rosamond and
10 Yeadon (2009) who explained that the move (not necessarily when carried out on the beam) can be
11 “accompanied by anxiety” (p. 187). In our first meeting the mother explained that her daughter was
12 becoming increasingly distressed by her inability to land the move safely, and she was concerned that
13 her daughter’s involvement in the sport, which she felt should be fun, was now becoming detrimental
14 to her health and wellbeing. From my previous experience with other gymnasts I was aware that the
15 flick on the beam was a move that, although not technically difficult for a relatively experienced
16 gymnast, was often the source of fear and low self-efficacy due to the risk of falling and the painful
17 injury, known colloquially as ‘splitting the beam’, where the gymnast lands heavily on the beam with
18 one leg either side. In the first session, this fear was articulated by the gymnast although she admitted
19 that on the many occasions she had previously attempted the move, she had only split the beam once.

20 **The Intervention**

21 At the commencement of the intervention the gymnast’s age remained of concern. Although I
22 was cognizant of Piaget’s stages of development, an initial search identified few practical activities
23 that would be suitable for a nine-year-old girl, so it became apparent that throughout the consulting
24 process I would need to develop a number of age-appropriate practical activities from adult versions.
25 With this knowledge informing the intervention and following the initial meeting and preliminary
26 evaluation, two distinct consulting goals emerged. The gymnast was frustrated by her inability to
27 complete her move and wanted to be able to complete a flick on the beam, and the parents wanted
28 their daughter to regain her confidence and subsequent enjoyment in her gymnastics. In order to

1 facilitate the fulfilment of these goals a program of six sessions over 24 weeks were planned to
2 include imagery, goal setting, and relaxation. The frequency of sessions ranged from two-five weeks
3 with most sessions taking place on a monthly basis at the gymnast's home. Most of the sessions
4 involved the gymnast and myself often lying on her lounge carpet. The sessions where she was alone
5 with me were based on the gymnast's decision as her mother explained that her daughter wanted to
6 take ownership of the process and didn't want her mother involved. To ensure ethical practice, these
7 sessions were carried out with the door open and the mother in an adjoining room. Following each
8 session the next session was planned in more detail. The sessions comprised:

- 9 1. Building rapport; Strengths and challenges; an introduction to imagery.
- 10 2. Development of an imagery script including positive images and motivational
11 prompts.
- 12 3. Explaining anxiety; focus and concentration; further work on imagery.
- 13 4. Relaxation; imagery; diary work.
- 14 5. Revisiting imagery and cognitive anxiety following being dropped from the team.
- 15 6. Goal setting (specifically process goals) and commitment.
- 16 7. Looking forwards and evaluation.

17 Although there were six sessions planned this was extended to seven sessions due to unexpected
18 events, i.e., the gymnast being dropped from a competition during the consulting process.

19 Although sessions were structured in a proactive approach loosely influenced by Orlick's
20 (2008) Wheel of Excellence, this was flexible to allow for reactive actions given the gymnast's
21 progression and other factors that may impact upon her progression. Fournier, Calmels, Durand-
22 Bush, and Salmela (2005) indicated the appropriateness of a PST for young gymnasts and identified
23 that in their study with gymnasts aged between 11- and 13-years-of-age that the greatest benefits were
24 seen when employing: "relaxation, activation, focusing, refocusing, and imagery" (p. 74). Although
25 there were a number of different techniques used in the intervention, the prime focus was on imagery
26 for confidence and skill development, and the understanding and reframing of the effects of anxiety
27 which were detrimental to the gymnast's ability to perform. The principles of these two areas have
28 been widely explored in other academic studies (e.g., Nicholls, Polman, & Levy, 2010; William &

Cumming, 2012), so the emphasis in this report is to illustrate the application of these two techniques in the context of working with very young athletes. In a study that explored rational emotive behavioral therapy (REBT) with young children, Grey (2010) acknowledged that “a child’s brain has not developed the ability to process information through a language-only medium. Therefore, it is necessary . . . to incorporate the idea that thoughts cause feelings in a developmentally appropriate manner” (p. 55). Hence, the focus of this intervention needed to move away from language and incorporate more kinesthetic and visual activities.

Imagery – the magic carpet. Imagery was a skill that was introduced early on in the intervention but which was revisited in subsequent sessions. The focus on imagery was informed by both research that identified that using imagery for mastery and affect impacts on challenge and threat appraisal tendencies (Williams & Cumming, 2012), but also due to the appropriateness of this technique for young children. However, in respect of the latter point the research was equivocal and required some further exploration. In their studies of cognitive development, Piaget and Inhelder (1971) proposed that very young children may not be able to rotate or scan (i.e., kinetic) in their use of imagery, which would by implication make it inappropriate for use in sport related imagery which is kinesthetic in nature. However, in a study that compared the imagery abilities of 5-, 8-, 14-year olds, and adults, Kosslyn, Margolis, Barrett, Goldknopf, and Daly (1990) implicitly identified that children as young as five years of age can and do use imagery. They found that the types of imagery used was not substantially different across ages and that it was not possible to classify the imagery used as predominantly static or kinetic. Of relevance to this particular case study the authors found that females were superior in their imagery abilities. Furthermore, research by Munroe-Chandler, Hall, Fishburne, and Strachan (2007) found benefits in the use of imagery by young gymnasts from a developmental perspective and suggested that the earlier an individual starts imagery use, the more benefits (e.g., increased learning and self-efficacy) that they derive from it. More recent research (Simonsmeier & Buecker, 2016) has also identified that motivational general–mastery imagery helps the young gymnasts aged between 7- and 14-years-of-age to remain focused, which the authors suggest may also have positive effects on performance at a competition. Accordingly, based on the information available at the time imagery was selected as a key skill to develop.

1 Vealey and Greenleaf (2006) stressed the importance of selling imagery to clients, and with
2 this in mind I utilized their suggestion of a fish weight on a piece of string to illustrate the link
3 between the mind and the body. This practical activity is consistent with psychoneuromuscular theory
4 (Jacobson, 1931) which suggests that imagined movement produces barely perceptible innervation in
5 the muscles. The gymnast's wonderment at the ability to 'think the weight into moving' and its
6 magical component set the tone for the imagery delivery. Cognizant of the importance of avoiding
7 imagery that might fall within the domain of the formal operations stage of cognitive development, I
8 started with very simple tasks such as using imagery of the gymnast's pencil case as this was
9 something that not only was she familiar with, but also had multisensory elements namely, texture,
10 and olfactory and visual components. When she was competent at imagining her pencil case we
11 progressed to simple imagery of the gymnasium involving identification of colors, smells, and
12 textures. Then, returning to the magical aspect of imagery that she had identified, and with
13 knowledge that the gymnast was a fan of the story of Aladdin, I introduced the idea of a magical
14 carpet that could (in her imagination) transport her from location to location. The magic carpet
15 concept is widely used in hypnosis and can be utilized as providing a safe environment (cf. Rhue &
16 Lynn, 1991). In this instance the carpet was used as a safe haven that she could return to when she
17 experienced fear, but it was also used to promote controllability, vividness, and self-awareness as part
18 of her imagery practice (cf. Vealey & Greenleaf, 2006).

19 Given the gymnast's age and the expectation that she may find it difficult to arrange her time
20 to practice her imagery, I decided to develop an imagery script that we recorded onto an audio file so
21 that she could listen to it at bedtime. In asking the questions of the gymnast to acquire the relevant
22 content, I drew on Williams, Cooley, Newell, Weibull, and Cumming's (2013) guidance on the
23 production of imagery scripts. Over two sessions, the gymnast took an active role in developing the
24 script and was instrumental in the identification of words and phrases to use. The imagery script
25 included both cognitive and motivational (general-mastery) imagery. It comprised the environment
26 involving her magic carpet, the gymnasium, and the beam, motivational imagery involving positive
27 feelings, confidence, and focus and cognitive imagery involving her technical proficiency and the
28 execution of the flick on the beam. The script was written in the first person as early tasks illustrated

1 that the gymnast primarily utilized internal imagery rather than external. This is consistent with
2 Mahoney and Avenier's (1977) research which identified that gymnasts are more likely to use internal
3 rather than external imagery. However, the decision to use an internal-focused script was primarily
4 due to the gymnast's individual feedback rather than the research, particularly as Mahoney and
5 Avenier's study has been critiqued as using leading questions (Callow & Hardy, 2004). Once the
6 gymnast, the mother, and I were satisfied with the content, flow, and technical accuracy of the script,
7 the gymnast recorded the script onto her iPod. The gymnast listened to her script at least four times
8 each week for the duration of the consultancy. In ongoing evaluation the gymnast attributed her
9 increased confidence on the beam to "doing my imagery".

10 **Anxiety - role play and art.** Underlying the gymnast's inability to complete the move was an
11 emotional response to being instructed by her coaches to execute the flick on the beam. Fear was the
12 prevalent emotion that she described when relating her experiences. This negative emotion was
13 identifiable through the terminology used and the narratives that she articulated, for example: "I'm
14 frightened of . . .", "It frightens me . . .", "it is scary". The use of such terminology was a common
15 occurrence in the early discussions surrounding her descriptions about the beam work, and was
16 accompanied by her descriptions of 'shaking' and 'having butterflies in my tummy'. These accounts
17 are consistent with empirical findings that indicate children as young as seven years old may interpret
18 physical symptoms such as trembling as being an indicator of danger (Muris, Hovee, Meesters, &
19 Mayer, 2004). The incorporation of accounts of both cognitive anxiety (e.g., fear) and somatic
20 anxiety (e.g., shaking) suggested a basic understanding of the reciprocal relationship between the two
21 components of anxiety (cf. Muris et al., 2004). My reflection after this disclosure included a search of
22 the literature that identified research by Grossbard, Smith, Smoll and Cumming (2009) who noted that
23 when children as young as seven years old perceive challenging activities in sport as threatening, this
24 is accompanied by task-irrelevant cognitive and emotional responses, distress, and potential avoidance
25 of that activity. This resonated with the experiences being recited to me by both the gymnast and her
26 mother as the gymnast was using crying and physical and emotional withdrawal to avoid attempting
27 the move. In their study the authors found that: "children are able to differentiate among somatic
28 anxiety, worry, and concentration disruption" (p. 161) but they noted that, consistent with my own

1 failure to identify useful practical activities to address competitive anxiety in such young athletes,
2 there are few interventions that have been designed to specifically reduce the multidimensional
3 components of anxiety in young athletes.

4 Accordingly, given the empirical evidence available and following the reflection on the
5 gymnast's experiences, I felt that it was appropriate to address both somatic and cognitive anxiety, but
6 it was evident that I would have to design some child-friendly activities to do so. Understanding and
7 managing the somatic anxiety was addressed through three methods, role play, art, and relaxation.
8 The role play addressed the evolutionary origins of the function of the autonomic nervous system
9 response to threats (hypothalamic, autonomic adrenal medulla pathway) and the part that adrenaline
10 plays in the fight or flight response. The role play comprised the gymnast taking on the role of a
11 caveman and me taking on the role of a scary wild animal. A game of hide and seek that made the
12 gymnast 'jump' was used to explain the manifestation of 'nerves' or 'butterflies'. The gymnast was
13 familiar with the term "butterflies" to refer to the somatic anxiety that she was experiencing and this
14 became the source of an art-based activity. Using art as a technique to address somatic anxiety, and
15 informed by art therapy in counselling and trauma services (cf. Landier, & Alice, 2010), we reframed
16 her interpretation of this somatic anxiety by discussing the beauty and positivity of real butterflies.
17 We spent some time drawing and then coloring purple (her favorite color) butterflies which she used
18 to both decorate her sport psychology folder and to stick on her bedroom wall by the low beam that
19 she had for practice in her room. Each time she experienced butterflies in her stomach she imagined
20 them as being beautiful, friendly, colorful, and of positive use. Finally, in line with more mainstream
21 sport psychology we spent some time using relaxation to control somatic anxiety (cf. Kassel, 2015).

22 The reframing of the somatic anxiety was also designed to address the cognitive anxiety that
23 she was experiencing. By reframing the meaning of the somatic anxiety the activities in the gym were
24 seen as less threatening and less likely to result in destructive cognitive anxiety. Where cognitive
25 anxiety was still apparent in the negative self-talk that the gymnast reported, a number of techniques
26 were used to address this. Early on in the consultation we had a conversation around the likelihood of
27 'splitting the beam' which the gymnast reported had only occurred once in hundreds of attempts.
28 During this conversation we discussed the likelihood of it happening again which she acknowledged

1 was very slim. However, her fear was articulated in terms of an appreciation of the pain that the one
2 fall had caused. Whilst the likelihood of a similar event occurring was low, the likelihood of serious
3 pain should it occur was high and therefore was a rational concern. Accordingly, the focus was on
4 diverting focus away from negative thoughts and towards more positivity. This was achieved through
5 two techniques, distraction and positive affirmations. Distraction was particularly important given that
6 in a study involving young athletes Vassilopoulos, Brouzos, Moberly, Tsorbatzoudis, and Tziouma
7 (2015) identified that the positive relationship between negative performance attitudes and sport
8 anxiety was stronger in those children who reported higher levels of anticipatory processing of a
9 sporting event. The magic carpet was used as the distraction and represented a haven away from fear.
10 The second technique involved through the use of positive affirming statements that were already part
11 of her imagery script such as “I can do this”, “I am steady” (cf. Critcher & Dunning, 2015).

12 Returning to the use of art, this technique was used throughout the intervention to address a
13 number of issues. It was apparent from discussions with the mother that being a gymnast was an
14 integral part of her daughter’s identity. The mother reported that her daughter was unable to switch
15 off from gymnastics, and it became clear through further discussion that the gymnast engaged in
16 practices that were normalized in the sport (cf. Smits, Jacobs & Knoppers, 2016), for example like
17 many young gymnasts she had a beam in her bedroom. In light of the gymnast’s strong athletic
18 identity, in addition to suggesting to the parents that there should be times when gymnastics was not
19 talked about and that their daughter should be given opportunities for free unstructured play with her
20 friends (Myer et al., 2016), I also adopted a simple light switch strategy. I provided the gymnast with
21 a small light switch which she decorated with stickers. She carried this switch with her in her gym
22 bag and used it to symbolically switch on and off from gymnastics. The decorating of the switch gave
23 her ownership and some pride in the device and gave her permission *not* to talk about or engage in
24 gymnastics.

25 **Effectiveness**

26 Evaluation of the intervention was through reflection, ongoing feedback from the gymnast
27 and her mother, and via a consultant evaluation form at the end of the intervention. Reflections on the
28 intervention will be addressed separately later in this paper. The ongoing feedback was inherently

positive both in respect of the process and the outcomes and was sought in a brief discussion with the mother before and after every session (usually lasting 10-15 minutes in total). In respect of the process, the mother informed me that her daughter enjoyed the sessions as they were “fun” and interactive. The gymnast enjoyed the imagery activities and her mother reported that she was self-motivated to listen to her imagery audio script several times a week. In terms of the outcome of the intervention, the gymnast achieved a flick on the low beam early on in the intervention although she experienced a temporary setback when her parents went abroad for a short period of time and she remained at home with her grandmother. However, by the end of the intervention the gymnast was regularly completing the move on the low beam and occasionally managing it on the regular height beam. Although it is difficult to assess the extent to which the intervention contributed to this improvement both the gymnast and the mother felt that the sport psychology support had been a significant contributor. The gymnast reported that she used her magic carpet when she experienced fear, upset, or negative self-talk and was no longer concerned when she experienced the effect of adrenaline (i.e., butterflies). The intervention was terminated after seven sessions as both the mother and I suspected that there was a dependency developing that could in the long term be detrimental to the gymnast’s engagement in her sport (cf. Andersen & Speed, 2012). At the end of the consultancy I asked the parents to complete a consultant evaluation form (based on Partington & Orlick, 1987). The mother completed the form and returned it several weeks later. In all aspects of the consultant characteristics the mother rated the consultant with a score of 10. In respect of the effectiveness she rated the intervention as helping a lot. At the time I reflected that it would have been useful to develop an evaluation form that the gymnast could have completed.

Reflections

As Anderson, Knowles and Gilbourne (2004) stated “it is insufficient for practitioners to learn a theory and simply apply it to practice” (p. 190) and that practitioners should use reflective practice to identify and learn from best practice (cf. Schön, 1983). The content and formulation of this paper represents dual-staged reflection (cf. Knowles, Gibourne, Borrie, & Nevill, 2001) which comprises both immediate and delayed reflection on action to learn from and to inform future practice.

Immediate reflection comprised a descriptive account of each session with the gymnast and my own reflections based on Anderson's (1999) amendments to Johns' (1994) model of reflection (Anderson et al., 2004), and furthermore comprised the basis of a case study as part of a submission for the qualification. My written reflections completed within 24 hours of each session comprised four informing headings: *A Description of the Consulting Experience*, *Reflections* (comprising consultant feelings and sources of knowledge), *Consequences of Actions*, and *Lessons Learned*. This model afforded me the opportunity not only to make a record of each session (*A Description of the Consulting Experience*), but also ensured that I acknowledged my own emotional responses and searched the literature for relevant empirical evidence (*Reflections*)¹. Regular monthly meetings with my supervisor and supervisory group also provided opportunity for concerns to be raised, issues to be explored, and emotional responses to be addressed; these meetings were recorded and complemented my case notes. In respect of this particular case the role of my supervisor was relatively limited as sessions tended towards a more holistic reflection on the group's practice across cases. Accordingly, although we discussed the age of this gymnast it was also discussed in relation to dealing with young athletes generally. The copious notes made around this case allowed retrospective or delayed reflection not only of the experiences but also of the reflections to be made several years later. Reflections were made about the approach used and concludes with recommendations for practice.

Approach

Initial reflections about the approach used were based on my own reflections on the sessions and feedback from the gymnast and her mother. In reflecting on the consultancy I returned to the intervention goals. By the end of the consultancy the gymnast was able to complete a flick on the low beam and was occasionally able to carry it out in the regular height beam; to what extent the intervention facilitated this is unclear but the gymnast attributed a significant part of her progress to the sport psychology support she was receiving. What was more certain was the development of psychological skills that the gymnast had acquired, she had adopted a number of strategies that she

¹ As part of the QSEP qualification a reflective log had to be submitted at regular intervals to an independent assessor (athletes' details were anonymized). I had previously received feedback about providing more in-depth reference to the empirical literature. Accordingly, by this point in the process I ensured that literature searches were a fundamental aspect of my written reflections.

1 could take into the future to apply to other situations. In respect of maintaining her enjoyment in the
2 sport there were underlying issues with the gymnastics coaching team, however, a focus of the
3 consultancy was that the gymnast's identity went beyond being a gymnast and I had provided her with
4 a number of strategies that allowed her to "switch off" from the sport so that it did not become
5 intrusive.

6 Through adopting a predominantly PST focused intervention, a number of opportunities were
7 missed. In addressing the primary issue, that the gymnast was frightened of doing a flick on the beam
8 and was therefore engaging in avoidance strategies, the intervention neglected to address a possible
9 contributory factor, that is the frustrations that were being demonstrated by the coaches. Ideally,
10 given the developmental limitations of a child of this age and the knowledge that children at the
11 concrete operations stage of their development are not in a position to hypothesize, it stands to reason
12 that the more situated the intervention the greater the chances of success. Indeed, recently Foster,
13 Maynard, Butt and Hays (2016) posited that "the need to implicitly embed PST into physical practice
14 would appear particularly helpful for youngsters" (p. 75). However, in this instance the parents were
15 reluctant to inform the coaching team of the intervention of a sport psychologist, partly due to their
16 perceptions that seeing a sport psychologist may reflect negatively on their daughter, but also due to
17 their conviction that some of the loss of enjoyment that their daughter was experiencing was due to
18 the coaching staff behaviors. This latter point was beyond the scope of this intervention as access to
19 the wider coaching team was not possible. The parents' belief was that if their daughter could perform
20 the move correctly then the behavior of the coach would change and the coaching behaviors would be
21 a moot subject. This area was neglected due to the initial concerns expressed by the parents that they
22 did not want the coaches to know about my engagement with their daughter. As a neophyte
23 practitioner I accepted this at face-value, however, with the benefit of experience I may have explored
24 this further and questioned whether this was due to ill-informed perceptions about sport psychology or
25 the parents' beliefs about the coaches' values. It may have been prudent to address the role that the
26 coaches have in creating a motivational-environment to reduce the anxiety felt by young gymnasts (cf.
27 White & Bennie, 2015).

28 Nevertheless, a PST based intervention was adopted as an appropriate approach based on the

empirical literature both within sport and in the wider developmental psychology literature. However, the use of imagery with young children since this consultancy has also identified opportunities that were missed at the time, namely the identification of the Sport Imagery Questionnaire–Children (SIQ-C; Hall, Munroe-Chandler, Fishburne, & Hall, 2009) which is designed for athletes between 7- and 14-years-of-age. However, despite accessing studies that have provided support for imagery with young children both in terms of developmental appropriateness and effectiveness, I remain somewhat uncomfortable about working with such young children where the underpinning goal is about performance, and endeavor to adopt a holistic approach also accommodates the developmental needs of the child. Although gymnastics is an early specialization sport with a relatively early age of elite success, the engagement in gymnastics meant that for this particular child there were limited opportunities to engage in other sports and to play with friends. Furthermore, although there was no indication that the child’s involvement in gymnastics was having a detrimental impact in other areas, the risks of disordered eating and injury, and the lack of robust evidence about the need for such early intensity (cf. Baker et al., 2009) left me with unresolved feelings about the ethics of working with such a young gymnast.

Lessons Learned and Recommendations for Practice.

From a professional perspective, I appreciated the importance of interventions being informed by the wider literature when working with young high performing athletes. The child development literature allowed me to ensure that my activities, language, and approach were age-appropriate. It became apparent through the reflective process that, as previously stated, interventions with young children should be situated as much as possible. However, where that it is not possible activities should be focused on tasks that go beyond language. Indeed, it appears from Foster et al. (2016) that psychologists who are working with young children and are adapting their approaches to use child-friendly rewards such as “stars, stickers, smiley faces, and certificates”. However, given that there is a demand for sport psychology input for young children; I have been approached to work with at least three gymnasts under 11 years of age, there is a real requirement for professionally produced child-friendly materials and for an evaluation form adapted for young children. In terms of lessons learned I have found that my practice is not always, on reflection, consistent with my stated philosophy.

1 Although, my philosophy was, and remains, athlete-focused (cf. Holt & Strean, 2001), I found that
2 when making retrospective reflections to write this paper, that I am missing the child's "voice" and
3 this reinforces the need for a more formal child evaluation.

4 In conclusion, this was ultimately a successful intervention in that the consulting goals were
5 ultimately achieved. However, the intervention highlighted a number of issues that were only
6 partially resolved, specifically, the need to engage with the wider team and the practicalities of
7 working with young children. Ultimately, it is important that sport psychology interventions with
8 young children to be informed by the developmental psychology literature, the ethics of practicing
9 with young children should be incorporated into consultants' practicing philosophies, and there is a
10 real need for materials that are specially adapted to meet the needs of younger clients.

References

- Anderson, A. G. (1999). *The development of a model to evaluate the effectiveness of applied sport psychology practice*. Unpublished doctoral dissertation, University of Coventry, UK.
- Anderson, A. G., Knowles, Z., & Gilbourne, D. (2004). Reflective Practice for Sport Psychologists: Concepts, Models, Practical Implications, and Thoughts on Dissemination. *The Sport Psychologist*, 18(2), 188-203.
- Andersen, M. B., & Speed, H. D. (2012). Therapeutic relationships in applied sport psychology. In Routledge Handbook of Applied Sport Psychology. *Routledge Online Studies on the Olympic and Paralympic Games*, 1(44), 3-11.
- Aoyagi, M. W., & Poczwadowski, A. (2012). Models of sport psychology: practice and delivery. A review. In S. Hanton, & S. Mellalieu (Eds.). *Professional practice in Sport Psychology: A review*. (pp. 5-30). New York, NY: Routledge.
- Aoyagi, M., & Portenga, S. T. (2010). The role of positive ethics and virtues in the context of sport and performance psychology service delivery. *Professional Psychology: Research and Practice*, 41, 253-259. doi: 10.1037/a0019483
- Baker, J., Cobley, S., & Fraser-Thomas, J. (2009). What do we know about early sport specialization? Not much! *High Ability Studies*, 20(1), 77-89. doi: 10.1080/13598130902860507
- Barbour, S., & Orlick, T. (1999). Mental skills of national hockey league players. *Journal of Excellence*, 2, 16-36.
- British Psychological Society (2015). *Qualification in Sport and Exercise Psychology: Candidate handbook*. Available from http://www.bps.org.uk/system/files/Public%20files/Quals/qsep_candidate_handbook_jan_2015.pdf
- Callow, N., & Hardy, L. (2004). The relationship between the use of kinaesthetic imagery and different visual imagery perspectives. *Journal of sports sciences*, 22(2), 167-177. doi: 10.1080/02640410310001641449
- Camiré, M., Forneris, T., Trudel, P., & Bernard, D. (2011). Strategies for helping coaches facilitate positive youth development through sport. *Journal of sport psychology in action*, 2(2), 92-99.

- doi: 10.1080/21520704.2011.584246
- Critcher, C. R., & Dunning, D. (2015). Self-affirmations provide a broader perspective on self-threat. *Personality and Social Psychology Bulletin*, 41(1), 3-18. doi: 10.1177/0146167214554956
- Diamond, A., & Lee, K. (2011). Interventions shown to aid executive function development in children 4 to 12 years old. *Science*, 333(6045), 959-964. doi:10.1126/science.1204529
- Foster, D., Maynard, I., Butt, J., & Hays, K. (2016). Delivery of Psychological Skills Training to Youngsters. *Journal of Applied Sport Psychology*, 28, 62-77. doi: 10.1080/10413200.2015.1063097
- Fournier, J. F., Calmels, C., Durand-Bush, N., & Salmela, J. H. (2005). Effects of a season-long PST program on gymnastic performance and on psychological skill development. *International Journal of Sport & Exercise Psychology*, 3(1), 59-78. doi: 10.1080/1612197X.2005.9671758
- Greenlees, I. (2009). Enhancing Confidence in a Youth Golfer. In B. Hemmings & T. Holder (Eds.). *Applied Sport Psychology: A Case-Based Approach* (pp. 89-105). Chichester, UK: Wiley-Blackwell.
- Grey, E. (2010). Use Your Brain: A Neurologically Driven Application of REBT With Children. *Journal of Creativity in Mental Health*, 5(1), 54-64. doi:10.1080/15401381003627160
- Grossbard, J. R., Smith, R. E., Smoll, F. L., & Cumming, S. P. (2009). Competitive anxiety in young athletes: Differentiating somatic anxiety, worry, and concentration disruption. *Anxiety, Stress & Coping*, 22(2), 153-166. doi: 10.1080/10615800802020643
- Hall, C. R., Mack, D. E., Paivio, A., & Hausenblas, H. A. (1998). Imagery use by athletes: development of the Sport Imagery Questionnaire. *International Journal of Sport Psychology*, 29(1), 73-89.
- Hall, C., Munroe-Chandler, K., Fishburne, G. J., & Hall, N. D. (2009). The sport imagery questionnaire for children (SIQ-C). *Measurement in Physical Education and Exercise Science*, 13, 93-107. doi:10.1080/10913670902812713
- Holt, N. L., & Strean, W. B. (2001). Reflecting on initiating sport psychology consultation: A self-narrative of neophyte practice. *The Sport Psychologist*, 15(2), 188-204.
- Jacobson, E. (1931). Electrical measurements of neuromuscular states during mental activities.

- 1 *American Journal of Physiology*, 96, 115-121.
- 2 Johns, C. (1994). Guided reflection. In A. Palmer, S. Burns & C. Bulman (Eds.). *Reflective practice in*
3 *nursing* (pp. 110-130). Oxford, UK: Blackwell Science.
- 4 Kassel, S. C. (2015). Stress Management and Peak Performance Crash Course for Ninth Graders in a
5 Charter School Setting. *Biofeedback*, 43(2), 90-93. doi: 10.5298/1081-5937-43.2.03
- 6 Keegan, R., Spray, C., Harwood, C., & Lavalley, D. (2010). The motivational atmosphere in youth
7 sport: Coach, parent, and peer influences on motivation in specializing sport participants.
8 *Journal of applied sport psychology*, 22(1), 87-105. doi: 10.1080/10413200903421267
- 9 Knowles, Z., Gilbourne, D., Borrie, A., & Nevill, A. (2001). Developing the reflective sports coach: A
10 study exploring the processes of reflective practice within a higher education coaching
11 programme. *Reflective Practice*, 2(2), 185-207. doi: 10.1080/14623940123820
- 12 Kosslyn, S. M., Margolis, J. A., Barrett, A. M., Goldknopf, E. J., & Daly, P. F. (1990). Age
13 differences in imagery abilities. *Child development*, 61(4), 995-1010. doi: 10.2307/1130871
- 14 Landier, W., & Alice, M. T. (2010). Use of complementary and alternative medical interventions for
15 the management of procedure-related pain, anxiety, and distress in pediatric oncology: an
16 integrative review. *Journal of pediatric nursing*, 25(6), 566-579.
17 doi:10.1016/j.pedn.2010.01.009
- 18 Mahoney, M.J. and Avenier, M. (1977). Psychology of the elite athlete: an exploratory study.
19 *Cognitive Therapy and Research*, 1, 135-141. doi: 10.1007/BF01173634
- 20 Munroe-Chandler, K. J., Hall, C. R., Fishburne, G. J., & Strachan, L. (2007). Where, when, and why
21 young athletes use imagery: An examination of developmental differences. *Research*
22 *quarterly for exercise and sport*, 78(2), 103-116. doi: 10.5641/193250307X13082490460580
- 23 Muris, P., Hovee, I., Meesters, C., & Mayer, B. (2004). Children's perception and interpretation of
24 anxiety-related physical symptoms. *Journal of behavior therapy and experimental psychiatry*,
25 35(3), 233-244. doi:10.1016/j.jbtep.2004.03.008
- 26 Myer, G. D., Jayanthi, N., DiFiori, J. P., Faigenbaum, A. D., Kiefer, A. W., Logerstedt, D., &
27 Micheli, L. J. (2016). Sports Specialization, Part II Alternative Solutions to Early Sport
28 Specialization in Youth Athletes. *Sports Health: A Multidisciplinary Approach*, 8(1), 65-73.

- doi: 10.1177/1941738115614811
- Nicholls, A. R., Polman, R., & Levy, A. R. (2010). Coping self-efficacy, pre-competitive anxiety, and subjective performance among athletes. *European journal of sport science*, 10(2), 97-102. doi: 10.1080/17461390903271592
- Orlick, T. (2008). *In Pursuit of Excellence: How to win in sport and life through mental training* (4th ed.). Champaign, IL: Human Kinetics.
- Orlick, T., & McCaffrey, N. (1991). Mental training with children for sport and life. *The Sport Psychologist*, 5, 322-334.
- Orlick, T. & Partington, J. (1988). Mental links to excellence. *The Sport Psychologist*, 2, 105-130.
- Partington, J., & Orlick, T. (1987). The sport psychology consultant evaluation form. *The Sport Psychologist*, 1(4), 309-317.
- Piaget, J., & Inhelder, B. (1971). *Mental imagery in the child*. New York: NY. Basic Books.
- Poczwadowski, A., Sherman, C. P., & Ravizza, K. (2004). Professional philosophy in the sport psychology service delivery: Building on theory and practice. *The Sport Psychologist*, 18(4), 445-463.
- Rhue, J. W., & Lynn, S. J. (1991). Storytelling, hypnosis and the treatment of sexually abused children. *International Journal of Clinical and Experimental Hypnosis*, 39(4), 198-214. doi: 10.1080/00207149108409636
- Rosamond, E. L., & Yeadon, M. R. (2009). The biomechanical design of a training aid for a backward handspring in gymnastics. *Sports Engineering*, 11(4), 187-193. doi: 10.1007/s12283-009-0023-6
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivation: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67. doi: 10.1006/ceps.1999.1020
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: NY. Basic Books.
- Sherman, C., & Poczwadowski, A. (2005). Integrating Mind and Body: Presenting Mental Skills to

- 1 Young Teams. In M. B. Andersen (Ed.) *Sport psychology in practice*. (pp. 17-44).
2 Champaign, IL: Human Kinetics.
- 3 Simonsmeier, B. A., & Buecker, S. (2016). Interrelations of Imagery Use, Imagery Ability, and
4 Performance in Young Athletes. *Journal of Applied Sport Psychology*. doi:
5 10.1080/10413200.2016.1187686
- 6 Smits, F., Jacobs, F., & Knoppers, A. (2016). 'Everything revolves around gymnastics': athletes and
7 parents make sense of elite youth sport. *Sport in Society*, 1-18. doi:
8 10.1080/17430437.2015.1124564
- 9 Vassilopoulos, S. P., Brouzos, A., Moberly, N. J., Tsorbatzoudis, H., & Tziouma, O. (2015).
10 Generalisation of the Clark and Wells cognitive model of social anxiety to children's athletic
11 and sporting situations. *British Journal of Guidance & Counselling*, 1-15. doi:
12 10.1080/03069885.2015.1057474
- 13 Vealey, R., & Greenleaf, C. (2006). Seeing Is Believing: Understanding and Using Imagery in Sport.
14 In J. M. Williams (Ed). *Applied Sport Psychology: Personal Growth to Peak Performance*
15 (pp. 306-348). New York, NY: McGraw Hill.
- 16 White, R. L., & Bennie, A. (2015). Resilience in youth sport: A qualitative investigation of
17 gymnastics coach and athlete perceptions. *International Journal of Sports Science &*
18 *Coaching*, 10(2-3), 379-393. doi: 10.1260/1747-9541.10.2-3.379.
- 19 Williams, S. E., Cooley, S. J., Newell, E., Weibull, F., & Cumming, J. (2013). Seeing the Difference:
20 Developing Effective Imagery Scripts for Athletes. *Journal of Sport Psychology in Action*,
21 4(2), 109-121. doi: 10.1080/21520704.2013.781560
- 22 Williams, S. E., & Cumming, J. (2012). Sport imagery ability predicts trait confidence, and challenge
23 and threat appraisal tendencies. *European Journal of Sport Science*, 12(6), 499-508. doi:
24 10.1080/17461391.2011.630102